Subject Index for Volume 42, *Materials Evaluation*

Acoustic Displacements for the Characterization of Surface Defects, Optical Detection of, R. L. Jungerman, B. T. Khuri-Yakub, and G. S. Kino, No. 4, p 444

Acoustic Emission Signals—the Rise-time Effect of Dynamic Forces, A Theoretical Evaluation of, M. Shibata, No. 1, p 107

Acoustic Emission to Factory Automation and Process Control, Applications of, S. J. Vahaviolos, No. 13, p 1650

Acoustic-imaging System, Locating and Sizing Surface-breaking Cracks with a Synthetic-aperture, D. K. Peterson, S. D. Bennett, and G. S. Kino, No. 4, p 451

Acoustic Sorting of Grinder Balls, F. Nadeau and J. F. Bussière, No. 12, p 1515

Advanced Nondestructive Evaluation Technology, H. J. Spitzer, No. 1, p 84

Aerosol Penetrant Materials, Safety Aspects of (Back to Basics), W. E. Mooz, No. 10, p 1192

Aircraft NDT, Voices in the Air—The Early Days of (NDT—The Yesteryears), R. Straw, No. 2, p 152

Aluminum Plate by Electrical Conductivity Testing, Quality Control of Heat-Treated, C. E. Burley and J. E. Duarte, No. 12, p 1487

Aluminum Radiators by Infrared Thermography, Quality Assurance of, E. P. Papadakis, H. L. Chesney, and R. G. Hurley, No. 3, p 333

Aluminum Welds in Composite Structure, Nondestructive Inspection of Miniature, A. J. Rogovsky and G. R. Holmquist, No. 3, p 318

Angle-beam Inspection, Calculator Program for Ultrasonic, P. Torchio, III, No. 7, p 874

Application of Eddy Current Impedance Plane Testing, D. J. Hagemaier, No. 8, p 1035

Applications of Acoustic Emission to Factory Automation and Process Control, S. J. Vahaviolos, No. 13, p 1650

ASNT NDT Level III Certificate, The Validity of the, R. D. McGuire, No. 1, p 54

AUGUR—A System Designed for Computer-Aided Evaluation of Ultrasonic Test Data in a Heavy-Plate Mill, C. G. Hullin, O. A. Barbian, G. Haralamb, and E. Raeder, No. 12, p 1492

Automated Eddy Current Inspection Systems, Evolution of, A. L. Thompson, No. 12, p 1511

Automated Leak Testing (Back to Basics), S. Giles, No. 2, p 146

Automated NDT (Back to Basics), F. A. Iddings, No. 12, p 1421

Automated Nondestructive Testing of Munitions, M. H. Weinberg, No. 12, p 1498

Automated System Using A Multivariate Waveform Classifier for Ultrasonic NDE of Heat-Fused PE Pipe Joints, An, M. F. Whalen, H. S. Sproules, C. B. Fulghum, and J. H. Gordon, No. 13, p 1638

Automated Ultrasonic Inspection System for Verifying Waste Container Integrity, Development of an, J. F. Cook, D. A. Aldrich, B. C. Anderson, and V. S. Scown, No. 13, p 1626

Automated Ultrasonic Test Bed, An, J. Brase, R. McKinney, K. Blaedel, J. Oppenheimer, S. Wong, and J. Simmons, No. 13, p 1619

Automatic Crack Detection with Computer Vision and Pattern Recognition of Magnetic Particle Indications, Y. F. Cheu, No. 12, p 1506

Automatic NDT Inspection for Safety and Savings, K. J. Law, No. 13, p 1644

Automatic Penetrant Processing Systems, A Design Breakthrough in, C. H. Exton, No. 12, p 1480

Automation and Process Control, Applications of Acoustic Emission to Factory, S. J. Vahaviolos, No. 13, p 1650

Automobile Axle Shafts, Computer-Aided Measurement of Case Depth and Surface Hardness in, C. H. Stephan and H. L. Chesney, No. 13, p 1612

Automotive Quality, NDT for, W. M. Jones, No. 12, p 1483

Bolts, Use of Ultrasonic Digital Thickness Gage in Crack Detection of (Notes on Basics), J. A. Segal, No. 8, p 978

Boron Nitride Scintillation Converter for Neutron Radiography, A, G. Matsumoto, M. Teramura, K. Okubo, and Y. Ikeda, No. 11, p 1379

Calculator Program for Ultrasonic Angle-beam Inspection (Back to Basics), P. Torchio, III, No. 7, p 874

Case Depth and Surface Hardness in Automobile Axle Shafts, Computer-Aided Measurement of, C. H. Stephan and H. L. Chesney, No. 13, p 1612

Characterization of Flaws in Piping Welds Using Satellite Pulses, G. J. Gruber, G. J. Hendrix, and W. R. Schick, No. 4, p 426

Color Vision Tests, Why (Back to Basics), W. Bailey, No. 13, p 1546

Composite Structure, Nondestructive Inspection of Miniature Aluminum Welds in, A. J. Rogovsky and G. R. Holmquist, No. 3, p 318

Compression Crack Closure Effect (CCCE)—A Basis for an Ultrasonic NDE Technique, P. A. Kapranos, No. 4, p 458

Computer-Aided Evaluation of Ultrasonic Test Data in a Heavy-Plate Mill, AUGUR—A System Designed for, C. G. Hullin, O. A. Barbian, G. Haralamb, and E. Raeder, No. 12, p 1492

Computer-Aided Measurement of Case Depth and Surface Hardness in Automobile Axle Shafts, C. H. Stephan and H. L. Chesney, No. 13, p 1612

Computer-Automated Inspection and Lifetime Analysis for Large Steam Turbine Rotors, B. M. Jacobs, No. 13, p 1631

Computerized Ultrasonic Scan System, The Implementation of a, V. E. Panhuise, L. Richmond, and R. Novak, No. 2, p 231

Computer Vision and Pattern Recognition of Magnetic Particle Indications, Automatic Crack Detection with, Y. F. Cheu, No. 12, p 1506

Concrete by X-radiography, Exploratory Tests of Corrosion of Reinforcing Steel in, I. Sekine and M. Fujinawa, No. 1, p 121

Contamination Control for Radioactive Shipments (Notes on

Subject Index for Volume 42, *Materials Evaluation*

Acoustic Displacements for the Characterization of Surface Defects, Optical Detection of, R. L. Jungerman, B. T. Khuri-Yakub, and G. S. Kino, No. 4, p 444

Acoustic Emission Signals—the Rise-time Effect of Dynamic Forces, A Theoretical Evaluation of, M. Shibata, No. 1, p 107

Acoustic Emission to Factory Automation and Process Control, Applications of, S. J. Vahaviolos, No. 13, p 1650

Acoustic-imaging System, Locating and Sizing Surface-breaking Cracks with a Synthetic-aperture, D. K. Peterson, S. D. Bennett, and G. S. Kino, No. 4, p 451

Acoustic Sorting of Grinder Balls, F. Nadeau and J. F. Bussière, No. 12, p 1515

Advanced Nondestructive Evaluation Technology, H. J. Spitzer, No. 1, p 84

Aerosol Penetrant Materials, Safety Aspects of (Back to Basics), W. E. Mooz, No. 10, p 1192

Aircraft NDT, Voices in the Air—The Early Days of (NDT—The Yesteryears), R. Straw, No. 2, p 152

Aluminum Plate by Electrical Conductivity Testing, Quality Control of Heat-Treated, C. E. Burley and J. E. Duarte, No. 12, p 1487

Aluminum Radiators by Infrared Thermography, Quality Assurance of, E. P. Papadakis, H. L. Chesney, and R. G. Hurley, No. 3, p 333

Aluminum Welds in Composite Structure, Nondestructive Inspection of Miniature, A. J. Rogovsky and G. R. Holmquist, No. 3, p 318

Angle-beam Inspection, Calculator Program for Ultrasonic, P. Torchio, III, No. 7, p 874

Application of Eddy Current Impedance Plane Testing, D. J. Hagemaier, No. 8, p 1035

Applications of Acoustic Emission to Factory Automation and Process Control, S. J. Vahaviolos, No. 13, p 1650

ASNT NDT Level III Certificate, The Validity of the, R. D. McGuire, No. 1, p 54

AUGUR—A System Designed for Computer-Aided Evaluation of Ultrasonic Test Data in a Heavy-Plate Mill, C. G. Hullin, O. A. Barbian, G. Haralamb, and E. Raeder, No. 12, p 1492

Automated Eddy Current Inspection Systems, Evolution of, A. L. Thompson, No. 12, p 1511

Automated Leak Testing (Back to Basics), S. Giles, No. 2, p 146

Automated NDT (Back to Basics), F. A. Iddings, No. 12, p 1421

Automated Nondestructive Testing of Munitions, M. H. Weinberg, No. 12, p 1498

Automated System Using A Multivariate Waveform Classifier for Ultrasonic NDE of Heat-Fused PE Pipe Joints, An, M. F. Whalen, H. S. Sproules, C. B. Fulghum, and J. H. Gordon, No. 13, p 1638

Automated Ultrasonic Inspection System for Verifying Waste Container Integrity, Development of an, J. F. Cook, D. A. Aldrich, B. C. Anderson, and V. S. Scown, No. 13, p 1626

Automated Ultrasonic Test Bed, An, J. Brase, R. McKinney, K. Blaedel, J. Oppenheimer, S. Wong, and J. Simmons, No. 13, p 1619

Automatic Crack Detection with Computer Vision and Pattern Recognition of Magnetic Particle Indications, Y. F. Cheu, No. 12, p 1506

Automatic NDT Inspection for Safety and Savings, K. J. Law, No. 13, p 1644

Automatic Penetrant Processing Systems, A Design Breakthrough in, C. H. Exton, No. 12, p 1480

Automation and Process Control, Applications of Acoustic Emission to Factory, S. J. Vahaviolos, No. 13, p 1650

Automobile Axle Shafts, Computer-Aided Measurement of Case Depth and Surface Hardness in, C. H. Stephan and H. L. Chesney, No. 13, p 1612

Automotive Quality, NDT for, W. M. Jones, No. 12, p 1483

Bolts, Use of Ultrasonic Digital Thickness Gage in Crack Detection of (Notes on Basics), J. A. Segal, No. 8, p 978

Boron Nitride Scintillation Converter for Neutron Radiography, A, G. Matsumoto, M. Teramura, K. Okubo, and Y. Ikeda, No. 11, p 1379

Calculator Program for Ultrasonic Angle-beam Inspection (Back to Basics), P. Torchio, III, No. 7, p 874

Case Depth and Surface Hardness in Automobile Axle Shafts, Computer-Aided Measurement of, C. H. Stephan and H. L. Chesney, No. 13, p 1612

Characterization of Flaws in Piping Welds Using Satellite Pulses, G. J. Gruber, G. J. Hendrix, and W. R. Schick, No. 4, p 426

Color Vision Tests, Why (Back to Basics), W. Bailey, No. 13, p 1546

Composite Structure, Nondestructive Inspection of Miniature Aluminum Welds in, A. J. Rogovsky and G. R. Holmquist, No. 3, p 318

Compression Crack Closure Effect (CCCE)—A Basis for an Ultrasonic NDE Technique, P. A. Kapranos, No. 4, p 458

Computer-Aided Evaluation of Ultrasonic Test Data in a Heavy-Plate Mill, AUGUR—A System Designed for, C. G. Hullin, O. A. Barbian, G. Haralamb, and E. Raeder, No. 12, p 1492

Computer-Aided Measurement of Case Depth and Surface Hardness in Automobile Axle Shafts, C. H. Stephan and H. L. Chesney, No. 13, p 1612

Computer-Automated Inspection and Lifetime Analysis for Large Steam Turbine Rotors, B. M. Jacobs, No. 13, p 1631

Computerized Ultrasonic Scan System, The Implementation of a, V. E. Panhuise, L. Richmond, and R. Novak, No. 2, p 231

Computer Vision and Pattern Recognition of Magnetic Particle Indications, Automatic Crack Detection with, Y. F. Cheu, No. 12, p 1506

Concrete by X-radiography, Exploratory Tests of Corrosion of Reinforcing Steel in, I. Sekine and M. Fujinawa, No. 1, p 121

Contamination Control for Radioactive Shipments (Notes on

Basics), B. W. Nethercutt, No. 8, p 980
Contribution to the Ultrasonic Detection and Sizing of Inner Wall Surface-breaking Cracks in Pipes, H. Wüstenberg, U. Haufe, and A. Erhard, No. 9, p 1142
Corrosion of Reinforcing Steel in Concrete by X-radiography, Exploratory Tests of, I. Sekine and M. Fujinawa, No. 1, p 121
Costs of Immorality in Nondestructive Testing, The, R. C. McMaster, No. 4, p 402
Crack Detection in Splice Gaps (Notes on Basics), J. Pellicer, No. 8, p 981
Crack Detection of Bolts, Use of Ultrasonic Digital Thickness Gage in (Notes on Basics), J. A. Segal, No. 8, p 978
Crack Detection with Computer Vision and Pattern Recognition of Magnetic Particle Indications, Automatic, Y. F. Cheu, No. 12, p 1506
Crack-like Defects in Thick Sections, Radiographic Detection of, M. E. Lapides, No. 6, p 788
Crack Monitor, Eddy Current Jet Engine Disk-, J. P. Barranger, No. 11, p 1374
Cracks in Economizer Inlet Header Sections, Tandem Probe Ultrasonic Measurement of, M. D. C. Moles and A. L. Allen, No. 6, p 803
Cracks in Pipes, Contribution to the Ultrasonic Detection and Sizing of Inner Wall Surface-breaking, H. Wüstenberg, U. Haufe, and A. Erhard, No. 9, p 1142
Crankshafts, Development of an Improved Sonic Resonance Inspection System for Nodularity in, B. V. Kovacs, J. Stone, and E. P. Papadakis, No. 7, p 906
C-scan Recordings: A Tutorial (Notes on Basics), J. M. Warren, No. 8, p 983
Defects from Resistivity Variations in Zirconium Alloy Tubes, An Eddy Current Probe for Separating, J. B. Hallet, G. Van Drunen, and V. S. Cecco, No. 10, p 1276
Design Breakthrough in Automatic Penetrant Processing Systems, A, C. H. Exton, No. 12, p 1480
Determination of Source-to-object Angle for Circumferential Welds (Notes on Basics), R. F. Eyerkuss and R. W. Engelbart, No. 8, p 978
Development and Applications of Fast-sensitive Magnetic Rubber Inspection Formulations, H. J. Weltman, W. T. Kaarlela, J. D. Reynolds, and J. E. Halkias, No. 7, p 917
Development of an Automated Ultrasonic Inspection System for Verifying Waste Container Integrity, J. F. Cook, D. A. Aldrich, B. C. Anderson, and V. S. Scown, No. 13, p 1626
Development of an Improved Sonic Resonance Inspection System for Nodularity in Crankshafts, B. V. Kovacs, J. Stone, and E. P. Papadakis, No. 7, p 906
Differential Probe Signals, A Fourier Descriptor Classification Scheme for, S. S. Udpa and W. Lord, No. 9, p 1136
Discontinuities Hidden Word Puzzle, W. J. Krizmanich, No. 13, p 1580
Double-inclination Probe for Sizing Steep Fatigue Cracks, M. A. Mahmoud, No. 8, p 1041
Do You Hear What I Hear? The Early Days of Pulse-echo Ultrasonics (NDT—The Yesteryears), R. Straw, No. 1, p 24
Dynamic Forces, A Theoretical Evaluation of Acoustic Emission Signals—the Rise-time Effect of, M. Shibata, No. 1, p 107
Eddy Current Impedance Plane Testing, Application of, D. J. Hagemaier, No. 8, p 1035
Eddy Current Innovation in Sweden, 1947-69 (NDT—The Yesteryears), P. O. Moore, No. 11, p 1310
Eddy Current Inspection Systems, Evolution of Automated, A. L. Thompson, No. 12, p 1511
Eddy Current Inspection System Using Signal Correlation to Improve Signal-to-Noise Ratio, An, T. W. Judd, No. 11, p 1384
Eddy Current Inspection Technique, The Remote Field, T. R. Schmidt, No. 2, p 225
Eddy Current Jet Engine Disk-Crack Monitor, J. P. Barranger, No. 11, p 1374
Eddy Current Probe for Separating Defects from Resistivity Variations in Zirconium Alloy Tubes, An, J. B. Hallet, G. Van Drunen, and V. S. Cecco, No. 10, p 1276
Eddy Current Probe Signals, Superposition of, D. Horne, S. Udpa, and W. Lord, No. 7, p 930
Eddy Currents, Stress Mapping with, W. G. Clark and B. J. Taszarek, No. 10, p 1272
Effect of Grain Size on Flaw Visibility Enhancement Using Split-spectrum Processing, The, N. M. Bilgutay and J. Saniie, No. 6, p 808
Effect of Surface Roughness on Ultrasonic Echo Amplitude in Steel, The, G. V. Blessing, P. P. Bagley, and J. E. James, No. 11, p 1389
Electrical Conductivity Testing, Quality Control of Heat-Treated Aluminum Plate by, C. E. Burley and J. E. Duarte, No. 12, p 1487
Elements of a Feature-based Ultrasonic Inspection System, J. L. Rose, No. 2, p 210
Energy-dispersive X-ray Spectroscopy, The X-ray Characterization of Phosphosilicate Film on Silicon Wafers by, H.-c. Tsai and G. A. Stone, No. 1, p 102
Evaluation by On-stream Radiography (Notes on Basics), R. W. Spencer, No. 8, p 977
Evaluation of a Racetrack Microtron for High-energy Radiography, R. A. Morris, J. R. London, and F. A. Hasenkamp, No. 1, p 116
Evolution of Automated Eddy Current Inspection Systems, A. L. Thompson, No. 12, p 1511
Exploratory Tests of Corrosion of Reinforcing Steel in Concrete by X-radiography, I. Sekine and M. Fujinawa, No. 1, p 121
Fatigue Cracks, Double-inclination Probe for Sizing Steep, M. A. Mahmoud, No. 8, p 1041
Feature-based Decision Process, Flaw Classification in Welded Plates Employing a Multidimensional, J. L. Rose, J. Nestleroth, L. Niklas, O. Ganglbauer, J. Ausserwoeger, and F. Wallner, No. 4, p 433
Feature-based Ultrasonic Inspection System, Elements of a, J. L. Rose, No. 2, p 210
Field Radiography—Images from the Past (NDT—The Yesteryears), R. D. Bell, No. 7, p 849
Flaw Characterization, The International State of the Art in Nondestructive Inspection of Welds with Special Emphasis on, H.-J. Meyer, No. 6, p 793
Flaw Characterization with HOLOSAFT, Flaw Sizing and, V. Schmitz, W. Müller, and G. Schäfer, No. 4, p 439
Flaw Classification in Welded Plates Employing a Multidimensional Feature-based Decision Process, J. L. Rose, J. Nestleroth, L. Niklas, O. Ganglbauer, J. Ausserwoeger, and F. Wallner, No. 4, p 433
Flaw Sizes from Ultrasonic Data, Practical Considerations for Estimating, D. A. Lee, T. J. Moran, and R. L. Crane, No. 9, p 1150
Flaw Sizing and Flaw Characterization with HOLOSAFT, V. Schmitz, W. Müller, and G. Schäfer, No. 4, p 439
Flaw Visibility Enhancement Using Split-spectrum Processing, The Effect of Grain Size on, N. M. Bilgutay and J. Saniie, No. 6, p 808
Fluorescence Measurement, 1982 Model, Penetrant, J. T. Schmidt and S. J. Robinson, No. 3, p 325, Errata, No. 6, p 821
Fluorescent Penetrant Sensitivity and Removability—What the Eye Can See, a Fluorometer Can Measure, S. J. Robinson and J. T. Schmidt, No. 8, p 1029
Founding of a German Ultrasonic Firm, The (NDT—The Yesteryears), H. Krautkrämer, No. 13, p 1554
Fourier Descriptor Classification Scheme for Differential Probe Signals, A, S. S. Udpa and W. Lord, No. 9, p 1136
Fracture Mechanics for Engineers and NDE Specialists, An Introduction to (Part 1) (Back to Basics), M. F. Kanninen, No. 4, p 370; *(Part 2),* No. 6, p 658
Fuel Bundle Distortion Characterization Using Neutron To-

mography and Potting, LMFBR, P. R. Betten and D. M. Tow, No. 6, p 815
Good Vibrations: The Development of Ultrasonic Resonance Testing, 1944-55 (NDT—The Yesteryears), P. O. Moore, No. 12, p 1450
Grain Size on Flaw Visibility Enhancement Using Split-spectrum Processing, The Effect of, N. M. Bilgutay and J. Saniie, No. 6, p 808
Grinder Balls, Acoustic Sorting of, F. Nadeau and J. F. Bussière, No. 12, p 1515
Heat-Fused PE Pipe Joints, An Automated System Using A Multivariate Waveform Classifier for Ultrasonic NDE of, M. F. Whalen, H. S. Sproules, C. B. Fulghum, and J. H. Gordon, No. 13, p 1638
Heat-Treated Aluminum Plate by Electrical Conductivity Testing, Quality Control of, C. E. Burley and J. E. Duarte, No. 12, p 1487
Heavy-Plate Mill, AUGUR—A System Designed for Computer-Aided Evaluation of Ultrasonic Test Data in a, C. G. Hullin, O. A. Barbian, G. Haralamb, and E. Raeder, No. 12, p 1492
Helium Leak Testing, Smart Dollars—Those Saved While (Tech Hint), C. N. Jackson, No. 9, p 1076
High-energy Radiography, Evaluation of a Racetrack Microtron for, R. A. Morris, J. R. London, and F. A. Hasenkamp, No. 1, p 116
High-energy Radiography, "If I Had a Million!" The Early Years of (NDT—The Yesteryears), R. Straw, No. 3, p 264
Holographic Nondestructive Testing (HNDT) of Propellant Grains, A. V. S. S. S. R. Sarma, T. G. G. Kutty, P. S. Mani, V. R. Ravindran, A. S. Sankaranarayanan, and S. A. Pillai, No. 8, p 1025
HOLOSAFT, Flaw Sizing and Flaw Characterization with, V. Schmitz, W. Müller, and G. Schäfer, No. 4, p 439
"If I Had a Million!" The Early Years of High-energy Radiography (NDT—The Yesteryears), R. Straw, No. 3, p 264
"If I Had 10 Million!" A Man and His Laboratory (NDT—The Yesteryears), R. Straw, No. 4, p 374
Immorality in Nondestructive Testing, The Costs of, R. C. McMaster, No. 4, p 402
Impedance Plane Testing, Application of Eddy Current, D. J. Hagemaier, No. 8, p 1035
Implementation of a Computerized Ultrasonic Scan System, The, V. E. Panhuise, L. Richmond, and R. Novak, No. 2, p 231
Importance of Visual Examination in NDT Application, The (Back to Basics), R. V. Johnson, No. 1, p 16
Industrial Radiography Applications, The Search for Rapid Information Using Radiographic Papers for, P.-A. Ruault, No. 10, p 1260
Infrared Sensing for Monitoring Fatigue Process of Metals, Using the Method of, Y. Huang, S. X. Li, S. E. Lin, and C. H. Shih, No. 8, p 1020
Infrared Thermography, Quality Assurance of Aluminum Radiators by, E. P. Papadakis, H. L. Chesney, and R. G. Hurley, No. 3, p 333
Inlet Header Sections, Tandem Probe Ultrasonic Measurement of Cracks in Economizer, M. D. C. Moles and A. L. Allen, No. 6, p 803
Inner Wall Surface-breaking Cracks in Pipes, Contribution to the Ultrasonic Detection and Sizing of, H. Wüstenberg, U. Haufe, and A. Erhard, No. 9, p 1142
International State of the Art in Nondestructive Inspection of Welds with Special Emphasis on Flaw Characterization, The, H.-J. Meyer, No. 6, p 793
Introduction to Fracture Mechanics for Engineers and NDE Specialists, An (Part 1) (Back to Basics), M. F. Kanninen, No. 4, p 370; *(Part 2),* No. 6, p 658
Jet Engine Disk-Crack Monitor, Eddy Current, J. P. Barranger, No. 11, p 1374
Large Steam Turbine Rotors, Computer-Automated Inspection and Lifetime Analysis for, B. M. Jacobs, No. 13, p 1631
Leak Testing, Automated (Back to Basics), S. Giles, No. 2, p 146
Lifetime Analysis for Large Steam Turbine Rotors, Computer-Automated Inspection and, B. M. Jacobs, No. 13, p 1631
Liquid Penetrant Inspectors, Reminders for (Notes on Basics), C. W. H. Lednick and B. A. Collins, No. 8, p 980
LMFBR Fuel Bundle Distortion Characterization Using Neutron Tomography and Potting, P. R. Betten and D. M. Tow, No. 6, p 815
Locating and Sizing Surface-breaking Cracks with a Synthetic-aperture Acoustic-imaging System, D. K. Peterson, S. D. Bennett, and G. S. Kino, No. 4, p 451
Long-run Investigation of Welds in Pressure Vessels and Pipes, G. Itoh, No. 7, p 900
Long Wavelengths, Ultrasonic Attenuation of a Void-containing Medium for Very, J. H. Williams, H. Yüce, and S. S. Lee, No. 2, p 219
Longitudinal Wave Attenuation, Measurement of Ultrasonic (Back to Basics), W. S. Burkle, No. 3, p 262
Magnetic Particle Indications, Automatic Crack Detection with Computer Vision and Pattern Recognition of, Y. F. Cheu, No. 12, p 1506
Magnetic Particle Inspection (Back to Basics), W. H. Bailey, No. 8, p 962
Magnetic Particle Inspection (Notes on Basics), I. Zydowsky, No. 8, p 982
Magnetic Rubber Inspection Formulations, Development and Applications of Fast-sensitive, H. J. Weltman, W. T. Kaarlela, J. D. Reynolds, and J. E. Halkias, No. 7, p 917
Measurement of Ultrasonic Longitudinal Wave Attenuation (Back to Basics), W. S. Burkle, No. 3, p 262
Metals, Using the Method of Infrared Sensing for Monitoring Fatigue Process of, Y. Huang, S. X. Li, S. E. Lin, and C. H. Shih, No. 8, p 1020
Methodology for Reflector Classification Analysis in Complex Geometric Welded Structures, A, J. L. Rose, Y. H. Jeong, E. Alloway, and C. T. Cooper, No. 1, p 98
Microtron for High-energy Radiography, Evaluation of a Racetrack, R. A. Morris, J. R. London, and F. A. Hasenkamp, No. 1, p 116
Molten/Solid Interfaces of Weld Pools, Ultrasonic Detection of, L. A. Lott, No. 3, p 337
Monitoring Fatigue Process of Metals, Using the Method of Infrared Sensing for, Y. Huang, S. X. Li, S. E. Lin, and C. H. Shih, No. 8, p 1020
Multivariate Waveform Classifier for Ultrasonic NDE of Heat-Fused PE Pipe Joints, An Automated System Using A, M. F. Whalen, H. S. Sproules, C. B. Fulghum, and J. H. Gordon, No. 13, p 1638
Munitions, Automated Nondestructive Testing of, M. H. Weinberg, No. 12, p 1498
NDT—A Household Word? (Back to Basics), J. Brignac, No. 9, p 1082
NDT for Automotive Quality, W. M. Jones, No. 12, p 1483
Neutron Radiography, A Boron Nitride Scintillation Converter for, G. Matsumoto, M. Teramura, K. Okubo, and Y. Ikeda, No. 11, p 1379
Neutron Tomography and Potting, LMFBR Fuel Bundle Distortion Characterization Using, P. R. Betten and D. M. Tow, No. 6, p 815
Nodularity in Crankshafts, Development of an Improved Sonic Resonance Inspection System for, B. V. Kovacs, J. Stone, and E. P. Papadakis, No. 7, p 906
Nondestructive Inspection of Miniature Aluminum Welds in Composite Structure, A. J. Rogovsky and G. R. Holmquist, No. 3, p 318
On-stream Radiography, Evaluation by (Notes on Basics), R. W. Spencer, No. 8, p 977
Optical Detection of Acoustic Displacements for the Characterization of Surface Defects, R. L. Jungerman, B. T. Khuri-Yakub, and G. S. Kino, No. 4, p 444
Pattern Recognition of Magnetic Particle Indications, Auto-

matic Crack Detection with Computer Vision and, Y. F. Cheu, No. 12, p 1506
Penetrant Fluorescence Measurement, 1982 Model, J. T. Schmidt and S. J. Robinson, No. 3, p 325; Errata, No. 6, p 821
Penetrant Processing Systems, A Design Breakthrough in Automatic, C. H. Exton, No. 12, p 1480
Philosophy, Ethics, and Integrity in Nondestructive Testing: A Grass Roots Opinion Paper, R. P. Krolicki, No. 9, p 1114
Phosphosilicate Film on Silicon Wafers by Energy-dispersive X-ray Spectroscopy, The X-ray Characterization of, H.-c. Tsai and G. A. Stone, No. 1, p 102
Pipe Joints, An Automated System Using a Multivariate Waveform Classifier for Ultrasonic NDE of Heat-Fused PE, M. F. Whalen, H. S. Sproules, C. B. Fulghum, and J. H. Gordon, No. 13, p 1638
Pipes, Long-run Investigation of Welds in Pressure Vessels and, G. Itoh, No. 7, p 900
Piping Coupler Shrink Fit, Ultrasonic Color Imaging and Stress Analysis of, M. C. Tsao, R. H. Grills, R. P. Simpson, and G. A. Andrew, No. 11, p 1393
Piping Welds Using Satellite Pulses, Characterization of Flaws in, G. J. Gruber, G. J. Hendrix, and W. R. Schick, No. 4, p 426
Potting, LMFBR Fuel Bundle Distortion Characterization Using Neutron Tomography and, P. R. Betten and D. M. Tow, No. 6, p 815
Practical Considerations for Estimating Flaw Sizes from Ultrasonic Data, D. A. Lee, T. J. Moran, and R. L. Crane, No. 9, p 1150
Pressure Vessels and Pipes, Long-run Investigation of Welds in, G. Itoh, No. 7, p 900
Process Control, Applications of Acoustic Emission to Factory Automation and, S. J. Vahaviolos, No. 13, p 1650
Propellant Grains, Holographic Nondestructive Testing (HNDT) of, A. V. S. S. S. R. Sarma, T. G. G. Kutty, P. S. Mani, V. R. Ravindran, A. S. Sankaranarayanan, and S. A. Pillai, No. 8, p 1025
Pulse-echo Ultrasonics, Do You Hear What I Hear? The Early Days of (NDT—The Yesteryears), R. Straw, No. 1, p 24
Quality Assurance of Aluminum Radiators by Infrared Thermography, E. P. Papadakis, H. L. Chesney, and R. G. Hurley, No. 3, p 333
Quality Control of Heat-Treated Aluminum Plate by Electrical Conductivity Testing, C. E. Burley and J. E. Duarte, No. 12, p 1487
Quantifying the Need for NDE Education of Engineers, G. C. Wheeler, No. 10, p 1210
Radioactive Shipments, Contamination Control for (Notes on Basics), B. W. Nethercutt, No. 8, p 980
Radiographic Detection of Crack-like Defects in Thick Sections, M. E. Lapides, No. 6, p 788
Radiographic Papers for Industrial Radiography Applications, The Search for Rapid Information Using, P.-A. Ruault, No. 10, p 1260
Railway Industry, Visualization Techniques for the Study of Ultrasonic Wave Propagation in the, K. G. Hall, No. 7, p 922
Reflector Classification Analysis in Complex Geometric Welded Structures, A Methodology for, J. L. Rose, Y. H. Jeong, E. Alloway, and C. T. Cooper, No. 1, p 98
Reminders for Liquid Penetrant Inspectors (Notes on Basics), C. W. H. Lednick and B. A. Collins, No. 8, p 980
Remote Field Eddy Current Inspection Technique, The, T. R. Schmidt, No. 2, p 225
Removability—What the Eye Can See, a Fluorometer Can Measure, Fluorescent Penetrant Sensitivity and, S. J. Robinson and J. T. Schmidt, No. 8, p 1029
Resistivity Variations in Zirconium Alloy Tubes, An Eddy Current Probe for Separating Defects from, J. B. Hallet, G. Van Drunen, and V. S. Cecco, No. 10, p 1276
Rise-time Effect of Dynamic Forces, A Theoretical Evaluation of Acoustic Emission Signals—the, M. Shibata, No. 1, p 107
Safety and Savings, Automatic NDT Inspection for, K. J. Law, No. 13, p 1644
Safety Aspects of Aerosol Penetrant Materials (Back to Basics), W. E. Mooz, No. 10, p 1192
Satellite Pulses, Characterization of Flaws in Piping Welds Using, G. J. Gruber, G. J. Hendrix, and W. R. Schick, No. 4, p 426
Savings, Automatic NDT Inspection for Safety and, K. J. Law, No. 13, p 1644
Search for Rapid Information Using Radiographic Papers for Industrial Radiography Applications, The, P.-A. Ruault, No. 10, p 1260
Sensitivity and Removability—What the Eye Can See, a Fluorometer Can Measure, Fluorescent Penetrant, S. J. Robinson and J. T. Schmidt, No. 8, p 1029
Signal Correlation to Improve Signal-to-Noise Ratio, An Eddy Current Inspection System Using, T. W. Judd, No. 11, p 1384
Silicon Wafers by Energy-dispersive X-ray Spectroscopy, The X-ray Characterization of Phosphosilicate Film on, H.-c. Tsai and G. A. Stone, No. 1, p 102
Sizing Steep Fatigue Cracks, Double-inclination Probe for, M. A. Mahmoud, No. 8, p 1041
Sonic Resonance Inspection System for Nodularity in Crankshafts, Development of an Improved, B. V. Kovacs, J. Stone, and E. P. Papadakis, No. 7, p 906
Source-to-object Angle for Circumferential Welds, Determination of (Notes on Basics), R. F. Eyerkuss and R. W. Engelbart, No. 8, p 978
Splice Gaps, Crack Detection in (Notes on Basics), J. Pellicer, No. 8, p 981
Split-spectrum Processing, The Effect of Grain Size on Flaw Visibility Enhancement Using, N. M. Bilgutay and J. Saniie, No. 6, p 808
Steel, The Effect of Surface Roughness on Ultrasonic Echo Amplitude in, G. V. Blessing, P. P. Bagley, and J. E. James, No. 11, p 1389
Stress Analysis of Piping Coupler Shrink Fit, Ultrasonic Color Imaging and, M. C. Tsao, R. H. Grills, R. P. Simpson, and G. A. Andrew, No. 11, p 1393
Stress Mapping with Eddy Currents, W. G. Clark and B. J. Taszarek, No. 10, p 1272
Superposition of Eddy Current Probe Signals, D. Horne, S. Udpa, and W. Lord, No. 7, p 930
Surface-breaking Cracks in Pipes, Contribution to the Ultrasonic Detection and Sizing of Inner Wall, H. Wüstenberg, U. Haufe, and A. Erhard, No. 9, p 1142
Surface-breaking Cracks with a Synthetic-aperture Acoustic-imaging System, Locating and Sizing, D. K. Peterson, S. D. Bennett, and G. S. Kino, No. 4, p 451
Surface Defects, Optical Detection of Acoustic Displacements for the Characterization of, R. L. Jungerman, B. T. Khuri-Yakub, and G. S. Kino, No. 4, p 444
Surface Hardness in Automobile Axle Shafts, Computer-Aided Measurement of Case Depth and, C. H. Stephan and H. L. Chesney, No. 13, p 1612
Surface Roughness on Ultrasonic Echo Amplitude in Steel, The Effect of, G. V. Blessing, P. P. Bagley, and J. E. James, No. 11, p 1389
Synthetic-aperture Acoustic-imaging System, Locating and Sizing Surface-breaking Cracks with a, D. K. Peterson, S. D. Bennett, and G. S. Kino, No. 4, p 451
Tandem Probe Ultrasonic Measurement of Cracks in Economizer Inlet Header Sections, M. D. C. Moles and A. L. Allen, No. 6, p 803
Theoretical Evaluation of Acoustic Emission Signals—the Rise-time Effect of Dynamic Forces, A, M. Shibata, No. 1, p 107
Thick Sections, Radiographic Detection of Crack-like Defects in, M. E. Lapides, No. 6, p 788
Ultrasonic Angle-beam Inspection, Calculator Program for (Back to Basics), P. Torchio, III, No. 7, p 874

Ultrasonic Attenuation of a Void-containing Medium for Very Long Wavelengths, J. H. Williams, H. Yüce, and S. S. Lee, No. 2, p 219
Ultrasonic Color Imaging and Stress Analysis of Piping Coupler Shrink Fit, M. C. Tsao, R. H. Grills, R. P. Simpson, and G. A. Andrew, No. 11, p 1393
Ultrasonic Data, Practical Considerations for Estimating Flaw Sizes from, D. A. Lee, T. J. Moran, and R. L. Crane, No. 9, p 1150
Ultrasonic Detection and Sizing of Inner Wall Surface-breaking Cracks in Pipes, Contribution to the, H. Wüstenberg, U. Haufe, and A. Erhard, No. 9, p 1142
Ultrasonic Detection of Molten/Solid Interfaces of Weld Pools, L. A. Lott, No. 3, p 337
Ultrasonic Digital Thickness Gage in Crack Detection of Bolts, Use of (Notes on Basics), J. A. Segal, No. 8, p 978
Ultrasonic Echo Amplitude in Steel, The Effect of Surface Roughness on, G. V. Blessing, P. P. Bagley, and J. E. James, No. 11, p 1389
Ultrasonic Firm, The Founding of a German (NDT—The Yesteryears), H. Krautkrämer, No. 13, p 1554
Ultrasonic Inspection System, Elements of a Feature-based, J. L. Rose, No. 2, p 210
Ultrasonic Inspection System for Verifying Waste Container Integrity, Development of an Automated, J. F. Cook, D. A. Aldrich, B. C. Anderson, and V. S. Scown, No. 13, p 1626
Ultrasonic Leak Detector: What Every Engineer Should Know, The (Back to Basics), G. L. Anderson, No. 11, p 1298
Ultrasonic Longitudinal Wave Attenuation, Measurement of (Back to Basics), W. S. Burkle, No. 3, p 262
Ultrasonic Measurement of Cracks in Economizer Inlet Header Sections, Tandem Probe, M. D. C. Moles and A. L. Allen, No. 6, p 803
Ultrasonic NDE of Heat-Fused PE Pipe Joints, An Automated System Using a Multivariate Waveform Classifier for, M. F. Whalen, H. S. Sproules, C. B. Fulghum, and J. H. Gordon, No. 13, p 1638
Ultrasonic NDE Technique, Compression Crack Closure Effect (CCCE)—A Basis for an, P. A. Kapranos, No. 4, p 458
Ultrasonic Resonance Testing, 1944-55, Good Vibrations: The Development of (NDT—The Yesteryears), P. O. Moore, No. 12, p 1450
Ultrasonic Scan System, The Implementation of a Computerized, V. E. Panhuise, L. Richmond, and R. Novak, No. 2, p 231
Ultrasonic Sound Path Slide (Notes on Basics), T. R. Moore and A. Matolcsy, No. 8, p 979
Ultrasonic Test Bed, An Automated, J. Brase, R. McKinney, K. Blaedel, J. Oppenheimer, S. Wong, and J. Simmons, No. 13, p 1619
Ultrasonic Test Data in a Heavy-Plate Mill, AUGUR—A System Designed for Computer-Aided Evaluation of, C. G. Hullin, O. A. Barbian, G. Haralamb, and E. Raeder, No. 12, p 1492
Ultrasonic Wave Propagation in the Railway Industry, Visualization Techniques for the Study of, K. G. Hall, No. 7, p 922
Use of Ultrasonic Digital Thickness Gage in Crack Detection of Bolts (Notes on Basics), J. A. Segal, No. 8, p 978
Using the Method of Infrared Sensing for Monitoring Fatigue Process of Metals, Y. Huang, S. X. Li, S. E. Lin, and C. H. Shih, No. 8, p 1020
Validity of the ASNT NDT Level III Certificate, The, R. D. McGuire, No. 1, p 54
Visual Examination in NDT Application, The Importance of (Back to Basics), R. V. Johnson, No. 1, p 16
Visualization Techniques for the Study of Ultrasonic Wave Propagation in the Railway Industry, K. G. Hall, No. 7, p 922
Voices in the Air—The Early Days of Aircraft NDT (NDT—The Yesteryears), R. Straw, No. 2, p 152
Void-containing Medium for Very Long Wavelengths, Ultrasonic Attenuation of a, J. H. Williams, H. Yüce, and S. S. Lee, No. 2, p 219
Waste Container Integrity, Development of an Automated Ultrasonic Inspection System for Verifying, J. F. Cook, D. A. Aldrich, B. C. Anderson, and V. S. Scown, No. 13, p 1626
Welded Plates Employing a Multidimensional Feature-based Decision Process, Flaw Classification in, J. L. Rose, J. Nestleroth, L. Niklas, O. Ganglbauer, J. Ausserwoeger, and F. Wallner, No. 4, p 433
Welded Structures, A Methodology for Reflector Classification Analysis in Complex Geometric, J. L. Rose, Y. H. Jeong, E. Alloway, and C. T. Cooper, No. 1, p 98
Weld Pools, Ultrasonic Detection of Molten/Solid Interfaces of, L. A. Lott, No. 3, p 337
Welds, Determination of Source-to-object Angle for Circumferential (Notes on Basics), R. F. Eyerkuss and R. W. Engelbart, No. 8, p 978
Welds in Pressure Vessels and Pipes, Long-run Investigation of, G. Itoh, No. 7, p 900
Welds with Special Emphasis on Flaw Characterization, The International State of the Art in Nondestructive Inspection of, H.-J. Meyer, No. 6, p 793
Why Color Vision Tests (Back to Basics), W. Bailey, No. 13, p 1546
X-radiography, Exploratory Tests of Corrosion of Reinforcing Steel in Concrete by, I. Sekine and M. Fujinawa, No. 1, p 121
X-ray Characterization of Phosphosilicate Film on Silicon Wafers by Energy-dispersive X-ray Spectroscopy, The, H.-c. Tsai and G. A. Stone, No. 1, p 102
Zirconium Alloy Tubes, An Eddy Current Probe for Separating Defects from Resistivity Variations in, J. B. Hallet, G. Van Drunen, and V. S. Cecco, No. 10, p 1276

Author Index for Volume 42, *Materials Evaluation*

Aldrich, D. A. (see Cook, J. F.), No. 13, p 1626
Allen, A. L. (see Moles, M. D. C.), No. 6, p 803
Alloway, E. (see Rose, J. L.), No. 1, p 98
Anderson, B. C. (see Cook, J. F.), No. 13, p 1626
Anderson, G. L., *The Ultrasonic Leak Detector: What Every Engineer Should Know* (Back to Basics), No. 11, p 1298
Andrew, G. A. (see Tsao, M. C.), No. 11, p 1393
Ausserwoeger, J. (see Rose, J. L.), No. 4, p 433
Bagley, P. P. (see Blessing, G. V.), No. 11, p 1389
Bailey, W. H., *Magnetic Particle Inspection* (Back to Basics), No. 8, p 962
_____, *Why Color Vision Tests* (Back to Basics), No. 13, p 1546
Barbian, O. A. (see Hullin, C. G.), No. 12, p 1492
Barranger, J. P., *Eddy Current Jet Engine Disk-Crack Monitor,* No. 11, p 1374
Bell, R. D., *Field Radiography—Images from the Past* (NDT—The Yesteryears), No. 7, p 849
Bennett, S. D. (see Peterson, D. K.), No. 4, p 451
Betten, P. R., and D. M. Tow, *LMFBR Fuel Bundle Distortion Characterization Using Neutron Tomography and Potting,* No. 6, p 815
Bilgutay, N. M., and J. Saniie, *The Effect of Grain Size on Flaw Visibility Enhancement Using Split-spectrum Processing,* No. 6, p 808
Blaedel, K. (see Brase, J.), No. 13, p 1619
Blessing, G. V., P. P. Bagley, and J. E. James, *The Effect of Surface Roughness on Ultrasonic Echo Amplitude in Steel,* No. 11, p 1389
Brase, J., R. McKinney, K. Blaedel, J. Oppenheimer, S. Wong, and J. Simmons, *An Automated Ultrasonic Test Bed,* No. 13, p 1619
Brignac, J., *NDT—A Household Word?* (Back to Basics), No. 9, p 1082
Burkle, W. S., *Measurement of Ultrasonic Longitudinal Wave Attenuation* (Back to Basics), No. 3, p 262
Burley, C. E., and J. E. Duarte, *Quality Control of Heat-Treated Aluminum Plate by Electrical Conductivity Testing,* No. 12, p 1487
Bussière, J. F. (see Nadeau, F.), No. 12, p 1515
Cecco, V. S. (see Hallet, J. B.), No. 10, p 1276
Chesney, H. L. (see Papadakis, E. P.), No. 3, p 333
_____ (see Stephan, C. H.), No 13, p 1612
Cheu, Y. F., *Automatic Crack Detection with Computer Vision and Pattern Recognition of Magnetic Particle Indications,* No. 12, p 1506
Clark, W. G., and B. J. Taszarek, *Stress Mapping with Eddy Currents,* No. 10, p 1272
Collins, B. A. (see Lednick, C. W. H.), No. 8, p 980
Cook, J. F., D. A. Aldrich, B. C. Anderson, and V. S. Scown, *Development of an Automated Ultrasonic Inspection System for Verifying Waste Container Integrity,* No. 13, p 1626
Cooper, C. T. (see Rose, J. L.), No. 1, p 98
Crane, R. L. (see Lee, D. A.), No. 9, p 1150
Duarte, J. E. (see Burley, C. E.), No. 12, p 1487
Engelbart, R. W. (see Eyerkuss, R. F.), No. 8, p 978
Erhard, A. (see Wüstenberg, H.), No. 9, p 1142
Exton, C. H., *A Design Breakthrough in Automatic Penetrant Processing Systems,* No. 12, p 1480
Eyerkuss, R. F., and R. W. Engelbart, *Determination of Source-to-object Angle for Circumferential Welds* (Notes on Basics), No. 8, p 978
Fujinawa, M. (see Sekine, I.), No. 1, p 121
Fulghum, C. B. (see Whalen, M. F.), No. 13, p 1638
Ganglbauer, O. (see Rose, J. L.), No. 4, p 433
Giles, S., *Automated Leak Testing* (Back to Basics), No. 2, p 146
Gordon, J. H. (see Whalen, M. F.), No. 13, p 1638
Grills, R. H. (see Tsao, M. C.), No. 11, p 1393
Gruber, G. J., G. J. Hendrix, and W. R. Schick, *Characterization of Flaws in Piping Welds Using Satellite Pulses,* No. 4, p 426
Hagemaier, D. J., *Application of Eddy Current Impedance Plane Testing,* No. 8, p 1035
Halkias, J. E. (see Weltman, H. J.), No. 7, p 917
Hall, K. G., *Visualization Techniques for the Study of Ultrasonic Wave Propagation in the Railway Industry,* No. 7, p 922
Hallet, J. B., G. Van Drunen, and V. S. Cecco, *An Eddy Current Probe for Separating Defects from Resistivity Variations in Zirconium Alloy Tubes,* No. 10, p 1276
Haralamb, G. (see Hullin, C. G.), No. 12, p 1492
Hasenkamp, F. A. (see Morris, R. A.), No. 1, p 116
Haufe, U. (see Wüstenberg, H.), No. 9, p 1142
Hendrix, G. J. (see Gruber, G. J.), No. 4, p 426
Holmquist, G. R. (see Rogovsky, A. J.), No. 3, p 318
Horne, D., S. Udpa, and W. Lord, *Superposition of Eddy Current Probe Signals,* No. 7, p 930
Huang, Y., S. X. Li, S. E. Lin, and C. H. Shih, *Using the Method of Infrared Sensing for Monitoring Fatigue Process of Metals,* No. 8, p 1020
Hullin, C. G., O. A. Barbian, G. Haralamb, and E. Raeder, *AUGUR—A System Designed for Computer-Aided Evaluation of Ultrasonic Test Data in a Heavy-Plate Mill,* No. 12, p 1492
Hurley, R. G. (see Papadakis, E. P.), No. 3, p 333
Iddings, F. A., *Automated NDT* (Back to Basics), No. 12, p 1421
Ikeda, Y. (see Matsumoto, G.), No. 11, p 1379
Itoh, G., *Long-run Investigation of Welds in Pressure Vessels and Pipes,* No. 7, p 900
Jackson, C. N., *Smart Dollars—Those Saved While Helium Leak Testing* (Tech Hint), No. 9, p 1076
Jacobs, B. M., *Computer-Automated Inspection and Lifetime Analysis for Large Steam Turbine Rotors,* No. 13, p 1631
James, J. E. (see Blessing, G. V.), No. 11, p 1389
Jeong, Y. H. (see Rose, J. L.), No. 1, p 98
Johnson, R. V., *The Importance of Visual Examination in NDT Application* (Back to Basics), No. 1, p 16
Jones, W. M., *NDT for Automotive Quality,* No. 12, p 1483

Judd, T. W., *An Eddy Current Inspection System Using Signal Correlation to Improve Signal-to-Noise Ratio*, No. 11, p 1384
Jungerman, R. L., B. T. Khuri-Yakub, and G. S. Kino, *Optical Detection of Acoustic Displacements for the Characterization of Surface Defects*, No. 4, p 444
Kaarlela, W. T. (see Weltman, H. J.), No. 7, p 917
Kanninen, M. F., *An Introduction to Fracture Mechanics for Engineers and NDE Specialists (Part 1)* (Back to Basics), No. 4, p 370
———, *An Introduction to Fracture Mechanics for Engineers and NDE Specialists (Part 2)* (Back to Basics), No. 6, p 658
Kapranos, P. A., *Compression Crack Closure Effect (CCCE)—A Basis for an Ultrasonic NDE Technique*, No. 4, p 458
Kino, G. S. (see Jungerman, R. L.), No. 4, p 444
———, (see Peterson, D. K.), No. 4, p 451
Khuri-Yakub, B. T. (see Jungerman, R. L.), No. 4, p 444
Kovacs, B. V., J. Stone, and E. P. Papadakis, *Development of an Improved Sonic Resonance Inspection System for Nodularity in Crankshafts*, No. 7, p 906
Krautkrämer, H., *The Founding of a German Ultrasonic Firm* (NDT—The Yesteryears), No. 13, p 1554
Krizmanich, W. J., *Discontinuities Hidden Word Puzzle*, No. 13, p 1580
Krolicki, R. P., *Philosophy, Ethics, and Integrity in Nondestructive Testing: A Grass Roots Opinion Paper*, No. 9, p 1114
Kutty, T. G. G. (see Sarma, A. V. S. S. S. R.), No. 8, p 1025
Lapides, M. E., *Radiographic Detection of Crack-like Defects in Thick Sections*, No. 6, p 788
Law, K. J., *Automatic NDT Inspection for Safety and Savings*, No. 13, p 1644
Lednick, C. W. H., and B. A. Collins, *Reminders for Liquid Penetrant Inspectors* (Notes on Basics), No. 8, p 980
Lee, D. A., T. J. Moran, and R. L. Crane, *Practical Considerations for Estimating Flaw Sizes from Ultrasonic Data*, No. 9, p 1150
Lee, S. S. (see Williams, J. H., Jr.), No. 2, p 219
Li, S. X. (see Huang, Y.), No. 8, p 1020
Lin, S. E. (see Huang, Y.), No. 8, p 1020
London, J. R. (see Morris, R. A.), No. 1, p 116
Lord, W. (see Horne, D.), No. 7, p 930
———, (see Udpa, S. S.), No. 9, p 1136
Lott, L. A., *Ultrasonic Detection of Molten/Solid Interfaces of Weld Pools*, No. 3, p 337
Mahmoud, M. A., *Double-inclination Probe for Sizing Steep Fatigue Cracks*, No. 8, p 1041
Mani, P. S. (see Sarma, A. V. S. S. S. R.), No. 8, p 1025
Matolcsy, A. (see Moore, T. R.), No. 8, p 979
Matsumoto, G., M. Teramura, K. Okubo, and Y. Ikeda, *A Boron Nitride Scintillation Converter for Neutron Radiography*, No. 11, p 1379
Mautz, R. A., and S. A. Viaclovsky, *AWS Structural Steel Inspection—An Inspector's Viewpoint*, No. 9, p 1078
McGuire, R. D., *The Validity of the ASNT NDT Level III Certificate*, No. 1, p 54
McKinney, R. (see Brase, J.), No. 13, p 1619
McMaster, R. C., *The Costs of Immorality in Nondestructive Testing*, No. 4, p 402
Meyer, H.-J., *The International State of the Art in Nondestructive Inspection of Welds with Special Emphasis on Flaw Characterization*, No. 6, p 793
Moles, M. D. C., and A. L. Allen, *Tandem Probe Ultrasonic Measurement of Cracks in Economizer Inlet Header Sections*, No. 6, p 803
Moore, P. O., *Eddy Current Innovation in Sweden, 1947-69* (NDT—The Yesteryears), No. 11, p 1310
———, *Good Vibrations: The Development of Ultrasonic Resonance Testing, 1944-55* (NDT—The Yesteryears), No. 12, p 1450
Moore, T. R., and A. Matolcsy, *Ultrasonic Sound Path Slide* (Notes on Basics), No. 8, p 979
Mooz, W. E., *Safety Aspects of Aerosol Penetrant Materials* (Back to Basics), No. 10, p 1192
Moran, T. J. (see Lee, D. A.), No. 9, p 1150
Morris, R. A., J. R. London, and F. A. Hasenkamp, *Evaluation of a Racetrack Microtron for High-energy Radiography*, No. 1, p 116
Müller, W. (see Schmitz, V.), No. 4, p 439
Nadeau, F., and J. F. Bussière, *Acoustic Sorting of Grinder Balls*, No. 12, p 1515
Nestleroth, J. (see Rose, J. L.), No. 4, p 433
Nethercutt, B. W., *Contamination Control for Radioactive Shipments* (Notes on Basics), No. 8, p 980
Niklas, L. (see Rose, J. L.), No. 4, p 433
Novak, R. (see Panhuise, V. E.), No. 2, p 231
Okubo, K. (see Matsumoto, G.), No. 11, p 1379
Oppenheimer, J. (see Brase, J.), No. 13, p 1619
Panhuise, V. E., L. Richmond, and R. Novak, *The Implementation of a Computerized Ultrasonic Scan System*, No. 2, p 231
Papadakis, E. P. (see Kovacs, B. V.), No. 7, p 906
———, H. L. Chesney, and R. G. Hurley, *Quality Assurance of Aluminum Radiators by Infrared Thermography*, No. 3, p 333
Pellicer, J., *Crack Detection in Splice Gaps* (Notes on Basics), No. 8, p 981
Peterson, D. K., S. D. Bennett, and G. S. Kino, *Locating and Sizing Surface-breaking Cracks with a Synthetic-aperture Acoustic-imaging System*, No. 4, p 451
Pillai, S. A. (see Sarma, A. V. S. S. S. R.), No. 8, p 1025
Raeder, E. (see Hullin, C. G.), No. 12, p 1492
Ravindran, V. R. (see Sarma, A. V. S. S. S. R.), No. 8, p 1025
Reynolds, J. D. (see Weltman, H. J.), No. 7, p 917
Richmond, L. (see Panhuise, V. E.), No. 2, p 231
Robinson, S. J. (see Schmidt, J. T.), No. 3, p 325; Errata, No. 6, p 821
———, and J. T. Schmidt, *Fluorescent Penetrant Sensitivity and Removability—What the Eye Can See, a Fluorometer Can Measure*, No. 8, p 1029
Rogovsky, A. J., and G. R. Holmquist, *Nondestructive Inspection of Miniature Aluminum Welds in Composite Structure*, No. 3, p 318
Rose, J. L., *Elements of a Feature-based Ultrasonic Inspection System*, No. 2, p 210
———, J. Nestleroth, L. Niklas, O. Ganglbauer, J. Ausserwoeger, and F. Wallner, *Flaw Classification in Welded Plates Employing a Multidimensional Feature-based Decision Process*, No. 4, p 433
———, Y. H. Jeong, E. Alloway, and C. T. Cooper, *A Methodology for Reflector Classification Analysis in Complex Geometric Welded Structures*, No. 1, p 98
Ruault, P.-A., *The Search for Rapid Information Using Radiographic Papers for Industrial Radiography Applications*, No. 10, p 1260
Saniie, J. (see Bilgutay, N. M.), No. 6, p 808
Sankaranarayanan, A. S. (see Sarma, A. V. S. S. S. R.), No. 8, p 1025
Sarma, A. V. S. S. S. R., T. G. G. Kutty, P. S. Mani, V. R. Ravindran, A. S. Sankaranarayanan, and S. A. Pillai, *Holographic Nondestructive Testing (HNDT) of Propellant Grains*, No. 8, p 1025
Schäfer, G. (see Schmitz, V.), No. 4, p 439
Schick, W. R. (see Gruber, G. J.), No. 4, p 426
Schmidt, J. T. (see Robinson, S. J.), No. 8, p 1029
———, and S. J. Robinson, *Penetrant Fluorescence Measurement, 1982 Model*, No. 3, p 325; Errata, No. 6, p 821
Schmidt, T. R., *The Remote Field Eddy Current Inspection Technique*, No. 2, p 225
Schmitz, V., W. Müller, and G. Schäfer, *Flaw Sizing and Flaw Characterization with HOLOSAFT*, No. 4, p 439
Scown, V. S. (see Cook, J. F.), No. 13, p 1626
Sekine, I., and M. Fujinawa, *Exploratory Tests of Corrosion of Reinforcing Steel in Concrete by X-radiography*, No. 1, p 121

Segal, J. A., *Use of Ultrasonic Digital Thickness Gage in Crack Detection of Bolts* (Notes on Basics), No. 8, p 978
Shibata, M., *A Theoretical Evaluation of Acoustic Emission Signals—the Rise-time Effect of Dynamic Forces,* No. 1, p 107
Shih, C. H. (see Huang, Y.), No. 8, p 1020
Simmons, J. (see Brase, J.), No. 13, p 1619
Simpson, R. P. (see Tsao, M. C.), No. 11, p 1393
Spencer, R. W., *Evaluation by On-stream Radiography* (Notes on Basics), No. 8, p 977
Spitzer, H. J., *Advanced Nondestructive Evaluation Technology,* No. 1, p 84
Sproules, H. S. (see Whalen, M. F.), No. 13, p 1638
Stephan, C. H., and H. L. Chesney, *Computer-Aided Measurement of Case Depth and Surface Hardness in Automobile Axle Shafts,* No. 13, p 1612
Stone, G. A. (see Tsai, H.-c.), No. 1, p 102
Stone, J., (see Kovacs, B. V.), No. 7, p 906
Straw, R., *Do You Hear What I Hear? The Early Days of Pulse-echo Ultrasonics* (NDT—The Yesteryears), No. 1, p 24; Erratum, No. 4, p 382
———, *Voices in the Air—The Early Days of Aircraft NDT* (NDT—The Yesteryears), No. 2, p 152
———, *"If I Had a Million!" The Early Years of High-energy Radiography* (NDT—The Yesteryears), No. 3, p 264; Errata, No. 4, p 375, and No. 5, p 649
———, *"If I Had 10 Million!" A Man and His Laboratory* (NDT—The Yesteryears), No. 4, p 374
Taszarek, B. J. (see Clark, W. G.), No. 10, p 1272
Teramura, M. (see Matsumoto, G.), No. 11, p 1379
Thompson, A. L., *Evolution of Automated Eddy Current Inspection Systems,* No. 12, p 1511
Torchio, P., III, *Calculator Program for Ultrasonic Angle-beam Inspection* (Back to Basics), No. 7, p 874
Tow, D. M. (see Betten, P. R.), No. 6, p 815
Tsai, H.-c., and G. A. Stone, *The X-ray Characterization of Phosphosilicate Film on Silicon Wafers by Energy-dispersive X-ray Spectroscopy,* No. 1, p 102
Tsao, M. C., R. H. Grills, R. P. Simpson, and G. A. Andrew, *Ultrasonic Color Imaging and Stress Analysis of Piping Coupler Shrink Fit,* No. 11, p 1393
Udpa, S. S. (see Horne, D.), No. 7, p 930
———, and W. Lord, *A Fourier Descriptor Classification Scheme for Differential Probe Signals,* No. 9, p 1136
Vahaviolos, S. J., *Applications of Acoustic Emission to Factory Automation and Process Control,* No. 13, p 1650
Van Drunen, G. (see Hallet, J. B.), No. 10, p 1276
Viaclovsky, S. A. (see Mautz, R. A.), No. 9, p 1078
Wallner, F. (see Rose, J. L.), No. 4, p 433
Warren, J. M., *C-scan Recordings: A Tutorial* (Notes on Basics), No. 8, p 983
Weinberg, M. H., *Automated Nondestructive Testing of Munitions,* No. 12, p 1498
Weltman, H. J., W. T. Kaarlela, J. D. Reynolds, and J. E. Halkias, *Development and Applications of Fast-sensitive Magnetic Rubber Inspection Formulations,* No. 7, p 917
Whalen, M. F., H. S. Sproules, C. B. Fulghum, and J. H. Gordon, *An Automated System Using A Multivariate Waveform Classifier for Ultrasonic NDE of Heat-Fused PE Pipe Joints,* No. 13, p 1638
Wheeler, G. C., *Quantifying the Need for NDE Education of Engineers,* No. 10, p 1210
Williams, J. H., Jr., H. Yüce, and S. S. Lee, *Ultrasonic Attenuation of a Void-containing Medium for Very Long Wavelengths,* No. 2, p 219
Wong, S. (see Brase, J.), No. 13, p 1619
Wüstenberg, H., U. Haufe, and A. Erhard, *Contribution to the Ultrasonic Detection and Sizing of Inner Wall Surface-breaking Cracks in Pipes,* No. 9, p 1142
Yüce, H. (see Williams, J. H., Jr.), No. 2, p 219
Zydowsky, I., *Magnetic Particle Inspection* (Notes on Basics), No. 8, p 982